# Before the Federal Communications Commission Washington, D.C. 20554

In the Matter of	)	
	)	
A National Broadband Plan for Our Future	)	GN Docket No. 09-51

COMMENTS OF THE NATIONAL EXCHANGE CARRIER ASSOCIATION, Inc.

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#### **Summary**

NECA recommends the Commission establish in its National Broadband Plan the following ambitious, but attainable, goal:

Ubiquitous nationwide access to fixed and mobile broadband services, with fiber-to-the-home (or equivalent-speed technology) as the long-term standard for fixed networks.

The plan should affirm the importance of universal service fund support for broadband networks in uneconomic-to-serve areas. Rather than attempt to support multiple networks, NECA recommends the Commission set a policy goal to provide cost-based support to only one fixed, and one mobile, broadband network in such areas. Carriers receiving such support should be required to provide open access to their broadband networks at reasonable, cost-based, rates, enabling entities seeking to provide competitive services to do so on a non-discriminatory basis.

To assure broadband networks remain sustainable over the long term, the Commission's plan must address both "middle mile" and access-to-content issues. The Commission must also address ways carriers can recover a reasonable portion of the costs of providing broadband circuits to other service providers on a wholesale basis, without endangering Internet freedoms.

Time is of the essence. Current universal service and intercarrier compensation mechanisms supporting today's multi-use, broadband-capable networks are deteriorating. This threatens the ability of small carriers even to maintain existing networks. To put the matter plainly: *America is in danger of slipping further behind in broadband deployment* unless existing problems are addressed. The Commission should accordingly take prompt action to resolve ongoing universal service and intercarrier compensation reform issues to assure continued availability of existing broadband service levels and improve prospects for expansion.

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### COMMENTS OF THE NATIONAL EXCHANGE CARRIER ASSOCIATION, Inc.

The Commission's April 8, 2009 *Notice of Inquiry* (NOI) in the above-captioned proceeding<sup>1</sup> seeks comment on the development of a National Broadband Plan for our country.

The National Broadband Plan provides the Commission with a rare opportunity to establish a new telecommunications policy paradigm. Prior regulatory programs have focused on the provision of switched local and long-distance voice telephony services. In a broadband world, high-capacity data circuits are "the new common lines" and must be treated as such by regulators by regulators.

In these comments, the National Exchange Carrier Association, Inc. (NECA) suggests the Commission establish in its National Broadband Plan the following ambitious, but attainable, goal:

Ubiquitous nationwide access to fixed and mobile broadband services, with fiber-to-the-home (or equivalent-speed technology) as the long-term standard for fixed networks. <sup>2</sup>

<sup>&</sup>lt;sup>1</sup> A National Broadband Plan for Our Future, GN Docket No. 09-51, Notice of Inquiry (rel. Apr. 8, 2009) (NOI).

<sup>&</sup>lt;sup>2</sup> Throughout these comments, NECA uses the terms "fixed" and "mobile" services in place of "wireline" and "wireless", as there are a number of NECA member companies employing fixed wireless technology to provide carrier-class point-to-point telephony and high-speed broadband services in circumstances where it is impractical or less efficient to install wire or fiber optic facilities.

As discussed herein, the Commission's plan should provide clear policy direction for accomplishing this goal in rural, high-cost areas. All rural consumers should be assured of having access to broadband services, comparable in availability, speed, price and variety of content to those offered in urban areas.

The plan should affirm the importance of providing universal service fund support to broadband network providers in high cost areas. While prior mechanisms have attempted to support multiple networks in areas fundamentally uneconomic for even one carrier to serve, the Commission's Plan should endorse a rational approach that aims to provide cost-based support to only one fixed, and one mobile, broadband network in such areas. Carriers receiving such support should be required to provide open access to their broadband networks at reasonable, cost-based, wholesale prices, thus enabling entities seeking to provide competitive services to consumers living in supported areas to do so on non-discriminatory terms and conditions.

NECA also suggests ways the Commission can help assure broadband networks, once deployed, remain sustainable over the long term. Part of this challenge is to develop ways to address both "middle mile" and access-to-content issues for rural broadband providers, as these issues pose obstacles to sustainability at least as significant, if not more so, than consumer awareness and education. Further, to assure broadband services remain affordable and do not unduly burden universal service funding mechanisms, the Commission must address ways carriers can recover a reasonable portion of the costs of providing broadband circuits to other service providers on a wholesale basis, without endangering the Commission's open network principles.

Time is of the essence. Current universal service and intercarrier compensation mechanisms supporting today's multi-use, broadband-capable networks are deteriorating rapidly.

This deterioration threatens not only to impede further broadband deployments, but actually cause reductions in existing broadband service levels. To put the matter plainly: *America is in danger of slipping further behind in broadband deployment* unless problems with existing regulatory programs are addressed quickly. Pending implementation of the National Broadband Plan, the Commission should accordingly take prompt action to resolve ongoing universal service and intercarrier compensation reform issues and disputes, so as to assure continued availability of existing broadband service levels as well as improve prospects for continued expansion.

## I. THE NATIONAL PLAN SHOULD ESTABLISH A CLEAR, AMBITIOUS, AND ECONOMICALLY RATIONAL GOAL: STATE-OF-THE-ART FIXED AND MOBILE BROADBAND NETWORKS DEPLOYED THROUGHOUT AMERICA.

The Commission's *Rural Broadband Report* demonstrates the importance of broadband services for rural America and the nation as a whole.<sup>3</sup> As stated in the *Report*, Americans now use the Internet for education, medical care, communications, public safety and law enforcement, web-based businesses, finance, and many other vital day-to-day activities.<sup>4</sup> Yet in rural areas many Americans lack access to the applications and services broadband networks make possible.<sup>5</sup>

NECA is acutely aware of the problems its member telephone companies face in deploying state-of-the-art broadband facilities and services in rural areas.<sup>6</sup> Participants in

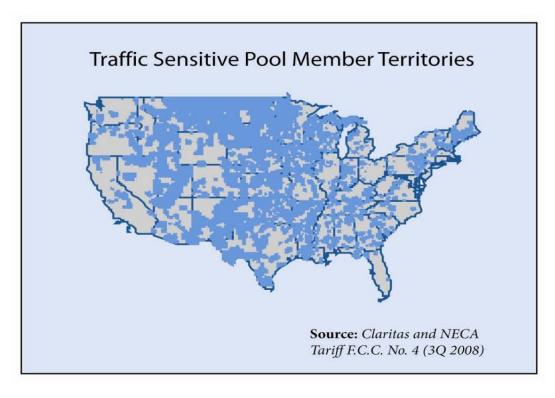
<sup>&</sup>lt;sup>3</sup> Bringing Broadband to Rural America: Report on a Rural Broadband Strategy, FCC (May 22, 2009) (*Rural Broadband Report*).

<sup>&</sup>lt;sup>4</sup> *Id.* at ¶ 14.

<sup>&</sup>lt;sup>5</sup> *Id.* at ¶ 15.

<sup>&</sup>lt;sup>6</sup> NECA is a non-stock, non-profit association formed in 1983 pursuant to the Commission's Part 69 access charge rules. *See generally* 47 C.F.R. § 69.600 *et seq.* NECA is responsible for filing interstate access tariffs and administering associated revenue pools on behalf of approximately

NECA's interstate access charge tariffs and related revenue pools are mostly rural Rate of Return (RoR) local exchange carriers (LECs) providing telecommunications services to a small percentage of the nation's fixed wireline telephone customers (approximately five percent of total lines served). But these small companies' service territories currently cover a substantial portion of the country's geographic area, <sup>7</sup> as shown in the composite map below.



These carriers have made extraordinary progress deploying modern broadband facilities in large portions of rural America.<sup>8</sup> They recognize the telecommunications marketplace is

1200 incumbent local exchange carriers ("ILECs") that choose to participate in these arrangements.

<sup>&</sup>lt;sup>7</sup> NECA pool members also provide service in Alaska, Hawaii and outlying U.S. territories and possessions. The numbers of lines served by NECA tariff participants, as well as geographic areas covered, typically change from year-to-year, however, as companies enter and exit NECA's pools.

<sup>&</sup>lt;sup>8</sup> See NECA Comments, Report on Rural Broadband Strategy, GN Docket No. 09-29 (Mar. 25, 2009), at 2-3. "NECA's most recent *Trends* report bears this out, showing overall broadband availability to customers served by its Traffic Sensitive (TS) pool members reached 92 percent in 2008, a large increase from the 2005 average broadband availability of 79 percent. The *Trends* 

changing rapidly. Traditional voice-only telephone services, while still important, now form only a small subset of their customers' overall telecommunications needs. Their customers are demanding packages of voice, data and video services at faster speeds and at prices reasonably comparable to those charged in urban areas. Rural customers also desire access to mobile telephony and broadband services at locations throughout their communities (not simply in towns and along major roadways).

The Commission clearly understands the importance of extending broadband service availability throughout rural areas. As stated in its recent *Rural Broadband Report*: "Bringing ubiquitous and affordable broadband services to rural American will improve the quality of education, healthcare, and public safety in rural America [and] will help to improve America's economy, its ability to compete internationally, and its unity as a nation." 9

NECA member companies see these principles in action every day. In rural Mississippi, for example, Georgetown Telephone Company first began providing broadband service in 2005, to a local entrepreneur wanting to resell items on the Internet. Soon, the telephone company obtained a grant to help provide computers and Internet access at the local library, along with training for local residents, and now serves 80 customers with broadband digital subscriber line (DSL) technology in a study area with only 350 access lines.

In Steele, North Dakota, twenty percent of BEK Communications Cooperative's customers with broadband service work from their homes with jobs in banking, sales, medical

report shows NECA pool members use a diverse set of network technologies to meet the demand for advanced services, including DSL, fiber, Ethernet, and fixed wireless. Some rural telephone companies are also upgrading legacy switching systems and deploying lower cost softswitch technology." *See also Trends 2008*, National Exchange Carrier Association, Inc. (2008), <a href="https://www.neca.org/portal/server.pt/gateway/PTARGS\_0\_0\_307\_206\_0\_43/https%3B/prodnet.www.neca.org/media/Trends2008\_web.pdf">https://www.neca.org/portal/server.pt/gateway/PTARGS\_0\_0\_307\_206\_0\_43/https%3B/prodnet.www.neca.org/media/Trends2008\_web.pdf</a> (*Trends 2008*).

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<sup>&</sup>lt;sup>9</sup> Rural Broadband Report at ¶ 15.

transcription, tax preparation, journalism, and software development – jobs that otherwise might have gone overseas.

Farmers Mutual Telephone Company in Jessup, Iowa has also seen a dramatic increase in the number of broadband-dependent home businesses, with several individuals doing medical transcriptions on behalf of a hospital in Chicago. Another local customer has started an Internet-based business leasing railroad freight cars.

Hartington Telephone in Hartington, Nebraska has found broadband makes a big difference, as "nearly every retail business in town" uses broadband for business purposes.

Broadband is no less important for customers of Wellman Telephone Cooperative Association in Wellman, Iowa, where a produce company depends on broadband to get commodity price quotes and schedule grain shipments, automotive service companies order car parts and tires, and an insurance broker uses broadband to research insurance needs and provide quotes and plan comparisons.

Such stories represent real progress. Yet, as the Commission's *Rural Broadband Report* recognizes, providing broadband services to rural customers is a real challenge. <sup>10</sup> In many rural areas, broadband services operate with speeds typically measured in hundreds of kilobits per second. <sup>11</sup> Rural customers need more sophisticated facilities, operating at far higher speeds, if

<sup>&</sup>lt;sup>10</sup> In the case of BEK Communications Cooperative in North Dakota, for example, the company's total territory covers over 6000 square miles. It averages about 1.5 miles of line per subscriber, and in some portions of its service area subscribers may be located twenty five to thirty miles away from BEK's central office. Distances between subscribers at "the end of the line" often extend from three to five miles, and in one case a subscriber at the end of a route was nearly ten miles from the next-closest customer. These distances, typical of those encountered by rural telephone companies, obviously make it difficult to provide broadband services to all customers no matter what technology may be available.

<sup>&</sup>lt;sup>11</sup> Rural Broadband Report at n. 20.

they are to stay current with their urban counterparts, and if rural businesses are to be competitive with service providers located in urban areas and foreign countries.

The *Rural Broadband Report* describes many obstacles facing carriers as they seek to deploy true high-speed broadband networks in rural areas. These include costs associated with deploying, maintaining and upgrading "last mile" and "middle mile" Internet connections, complex choices among potential distribution and transmission technologies, "scalability" considerations, weather and environmental conditions, survivability, redundancy and security issues, and difficulties associated with maintaining and repairing remote facilities, among other things.<sup>12</sup>

These challenges are indeed significant, but as the *Report* points out, they are conceptually no different than those facing America when it contemplated providing electricity and telephone service throughout the country in the 1930's, or when it decided to build a national highway system in the 1950's. What is needed now is a clear goal at least as ambitious for 21st Century broadband service deployment as rural electrification and national road building were in the 20th Century. NECA therefore respectfully suggests the Commission adopt the following as its National Broadband Deployment goal:

Ubiquitous nationwide access to fixed and mobile broadband services, with fiber-to-the-home (or equivalent-speed technology) as the long-term standard for fixed networks.

<sup>&</sup>lt;sup>12</sup> See Id. at ¶¶ 78-87. Rural carriers also may encounter significant difficulties obtaining access to financing for network investments. See e.g., Comments of CoBank, WC Docket No. 05-337 (Apr. 17, 2008), at 4 ("Rural ILECs rely heavily on debt capital to maintain and improve this rural infrastructure. The repayment of those loans depends on access to universal service support and existing cost recovery mechanisms. . . . Lenders require a high degree of certainty regarding a borrower's capacity to repay debt. There is a direct correlation between the ability of a borrower to repay debt capital and the amount of capital a lender is willing to make available to a borrower."). See also, Comments of the Rural Telephone Finance Cooperative, WC Docket No. 05-337 (Apr. 15, 2008).

<sup>&</sup>lt;sup>13</sup> See Rural Broadband Report at ¶¶ 33-40.

The prospect of providing dual fixed and mobile broadband networks throughout

America may seem daunting, but it is difficult to see why the Commission and the nation should settle for anything less. It will obviously take years for existing fiber and broadband-capable mobile networks to be built out to all rural areas and residential premises. Pending such deployment, the Commission will need to maintain and continually adjust standards for what is expected of a "broadband" network, as these will likely evolve over time. In some areas, for example, fixed or mobile broadband speeds in the 1 - 10 Megabit/second range would represent remarkable progress. In other regions and markets, broadband speeds of 50 Megabits or higher might be achievable and in demand by users in the near future. The important point is the Commission should aim high, and articulate a vision establishing national telecommunications policy for years to come.

In prior comments on universal service reform, NECA supported the Federal-State Joint Board's 2007 recommendation for separate funding for fixed and complementary mobile services. <sup>14</sup> In the broadband context, Congress has strongly encouraged the Commission to address consumers' needs for both types of services. <sup>15</sup> While NECA does not take any position on the type of technology or speed levels attainable by mobile services, it appears fiber technology – with its nearly unlimited capacity, security, survivability and cost-effectiveness – provides the ultimate standard for fixed service broadband capability and therefore should be adopted as the technology of choice for such services. <sup>16</sup>

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<sup>&</sup>lt;sup>14</sup> NECA *Comments*, WC Docket No. 05-337 (Apr. 17, 2008), at 11.

<sup>&</sup>lt;sup>15</sup> See 2008 Farm Bill, Joint Explanatory Statement of the Committee of Conference, at 151.

<sup>&</sup>lt;sup>16</sup> As Free Press recently observed, "FTTH currently is the only consumer technology deployed that is capable of offering dedicated symmetrical bandwidths approaching (or exceeding) 100 Mbps — a bandwidth that is arguably 'future-proof.'" "Down Payment on Our Digital Future:

In many areas of the country, the Commission can expect market forces to accomplish the goal of ubiquitous fixed and mobile broadband networks. Indeed, many areas already have the benefit of multiple service providers seeking to provide both fixed and mobile broadband competitive services. As technology develops and costs drop, it may be possible for competitive networks to extend further and further into higher cost and more rural areas. But such competition may take far longer to develop, and indeed may never be economically feasible, in many rural and high-cost areas of our nation.

Accordingly, the Commission's National Broadband Plan should also establish a goal of developing economically rational funding mechanisms to support universal fixed and mobile networks specifically targeted to high-cost areas. As the Commission is all-too-aware, current universal service programs have irrationally attempted to support the provision of multiple voice and wireless networks in areas that cannot economically support even one carrier. <sup>17</sup> Scarce broadband support funds should be targeted to areas where it is fundamentally uneconomic for any provider to deploy state-of-the-art fixed and mobile network facilities.

In such areas, the Commission would need to determine ways to select carriers responsible for providing fixed and mobile broadband services and therefore eligible for support. It makes logical sense to require incumbent local exchange carriers to offer fixed broadband services in most rural areas, as these carriers typically are obligated to provide basic telephony services throughout their service territories, and in most cases they have already installed

Stimulus Policies for the 21st Century", Free Press (Dec. 2008), at 12 (available at http://www.freepress.net/files/DownPayment\_DigitalFuture.pdf).

<sup>&</sup>lt;sup>17</sup> High-Cost Universal Service Support, WC Docket No. 05-337, Federal-State Joint Board on Universal Service, CC Docket No. 96-45, Recommended Decision, 22 FCC Rcd 20477 (2007), at ¶ 35 (2007 Recommended Decision) ("We believe it is no longer in the public interest to use federal universal service support to subsidize competition and build duplicate networks in highcost areas.").

extensive state-of-the-art distribution and fiber loop plant deep within their networks. <sup>18</sup>

Consistent with prior filings, NECA continues to recommend support for both fixed and mobile broadband service providers be based on actual costs as opposed to theoretical models. <sup>19</sup>

Finally, under NECA's proposed approach, any entity obtaining support to build and maintain fixed or wireless broadband facilities to serve high-cost areas should be required to provide "open access" to their networks at wholesale prices. In an open access environment, multiple service providers can offer "over the top" voice, video and data services and applications to end users over supported fixed and mobile networks on a competitive basis. <sup>20</sup> Further, an "open access" requirement may encourage partnerships among middle and last mile providers, rather than create artificial competition for USF dollars. <sup>21</sup>

<sup>18</sup> See Id. at ¶¶ 16-23.

<sup>&</sup>lt;sup>19</sup> *E.g.*, NECA Comments, WC Docket No. 05-337 (May 31, 2007), at 8; NECA Comments, CC Docket No. 96-45 (Sept. 30, 2005), at 2-4; NECA Comments, CC Docket No. 96-45 (Oct. 15, 2004), at 13-14.

<sup>&</sup>lt;sup>20</sup> Numerous parties have pointed out the advantages of requiring providers receiving funds from support mechanisms to make their networks openly available to other providers. See, e.g., "Broadband Growth and Policies in OECD Countries", Organisation for Economic Co-Operation and Development (OECD) (2008), at 13 ("Any new infrastructure built using government funds should also be open access – meaning that access to that network is provided on non-discriminatory terms.") (available at http://www.oecd.org/dataoecd/32/57/40629067.pdf); "Dismantling Digital Deregulation: Toward a National Broadband Strategy", Free Press, at 103 ("[I]t is inefficient to fund multiple infrastructures in high-cost areas, but consumers in these areas must be able to enjoy the benefits of competition. Thus any infrastructure supported by the new Broadband Deployment High Cost Fund must be operated under open access obligations.") (available at http://www.freepress.net/files/Dismantling\_Digital\_Deregulation.pdf); Letter of Kenneth C. Johnson, Counsel for Panhandle Telecommunications Systems, Inc., to Marlene H. Dortch, FCC, CC Docket No. 96-45 (Jan. 11, 2008). But see "The Role of Competition in a National broadband Policy", Robert D. Atkinson, Information Technology and Innovation Foundation, at 8 (discussing need for balance between open access requirements and possible disincentives to investment caused by below-cost pricing requirements) (available at http://www.itif.org/files/JTHTL.pdf).

<sup>&</sup>lt;sup>21</sup> RoR carriers are currently subject to the non-discrimination and cost-based pricing requirements set forth in Title II of the Telecommunications Act. Over time, the Commission has fine-tuned the application of traditional Title II regulation to specific services and classes of

NECA recognizes the development of policies, programs and specific rules along the lines described above is easier said than done. As noted above, it may not immediately be clear how the Commission or state regulators can determine what areas would qualify for support under an "uneconomic to serve" criteria. The number of specific areas meeting this criterion can be expected to change continually, as technology develops and local economies grow or shrink. Similarly, required broadband speed and capability levels can be expected to evolve with technology and marketplace developments. Ongoing regulatory monitoring of deployment levels and service criterion will undoubtedly be necessary. Further, management of "open access" rules for broadband is a highly-contentious subject, and is likely to remain so at least until such time as customers have a number of choices for broadband network providers in particular areas.

The Commission need not resolve all such issues now, however, but should instead simply recognize in its National Broadband Plan the importance of assuring access to state-of-the-art fixed and mobile broadband services throughout the United States; the need to develop support mechanisms that direct funding in an economically-rational manner (*i.e.*, mechanisms that provide sufficient and predictable support, but only where it is needed); and the need to assure customers in high-cost areas lacking access to competitive networks and services have the ability to access the same range of competitive information and service applications available to consumers in urban areas, at comparable prices. With these basic, economically rational principles firmly established as part of a National Broadband Plan, subsequent proceedings can

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telecommunications services providers, and has expanded the scope of its Title I authority with respect to other types of providers. These evolving regulatory structures can be expected to form the basis of specific "open access" requirements imposed on support recipients as discussed above.

be expected to move quickly towards accomplishment of the Commission's overall broadband goals.

### II. THE NATIONAL BROADBAND PLAN MUST ALSO ADDRESS THE NEED FOR "SUSTAINABLE" BROADBAND SERVICES IN HIGH-COST AREAS.

The Commission's *Rural Broadband Report* makes plain broadband networks must remain sustainable beyond initial deployment. "[O]nce built, networks must generate enough revenue to cover their costs."<sup>22</sup>

NECA strongly agrees. In its *Rural Broadband Report*, the Commission largely looked at "sustainability" problems as relating to consumer education and affordability (*i.e.*, emphasizing the need for programs to increase consumer awareness, "digital literacy" campaigns, outreach efforts, provision of reduced-price equipment programs, etc.). Other key factors impeding sustainability may be equally important. For rural carriers, these obstacles include difficulties obtaining reasonably-priced high capacity connections to the Internet backbone, difficulties obtaining access to program content at reasonable prices, and uncertainty regarding the extent to which carriers may recover the economic costs of providing wholesale services to applications and content providers on mutually-agreeable terms and conditions. <sup>24</sup>

The World Wide Web and related Internet-based services are increasingly migrating to bandwidth-intensive interactive content, valuable not only for entertainment purposes but for education, telework, telemedicine, public safety, and a broad variety of other economically valuable applications. Demand for these services is synergistic. That is, consumers seeking

 $<sup>^{22}</sup>$  Rural Broadband Report at ¶ 105 (emphasis added).

<sup>&</sup>lt;sup>23</sup> See Id. at ¶¶ 105-112.

<sup>&</sup>lt;sup>24</sup> See The Packet Train Needs to Stop at Every Door, NECA (June 2006).

high-speed access to the Internet quickly find themselves using their connections for voice, shopping, interactive video and entertainment applications, while consumers initially interested in video or music soon learn how broadband connections to the Internet can permit them to work more effectively on-line, participate in distance learning classes, or utilize any number of non-entertainment related services.<sup>25</sup>

In rural areas, however, carriers must be able to provide broadband services that appeal to a large percentage of customers – both business and residential. Otherwise, there simply won't be enough paying customers to support ongoing maintenance of local and middle mile networks. Rural carriers and local Internet Service Providers (ISPs) therefore must have the capability to offer all types of services, at reasonable rates, for broadband services to remain sustainable. These entities must, for example, be able to obtain high-speed connections to the Internet backbone, extending over extremely long distances (in some cases, hundreds of miles), if rural consumers are to experience access to Internet-based services at speeds and prices reasonably comparable to those available in urban areas.

The Commission's *Rural Broadband Report* summarizes several issues associated with obtaining connections to the Internet backbone, including availability and pricing of special access transport services and the possibility fixed, unlicensed wireless devices utilizing TV "white space" frequencies might someday provide alternative Internet backhaul solutions.<sup>26</sup> The

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<sup>&</sup>lt;sup>25</sup> As NTCA recently pointed out in comments filed in the Commission's *Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming*: "[a]s video delivery moves to an IP format, video demand will spur broadband deployment and broadband availability will increase video demand. The two are intrinsically linked." NTCA Comments, MB Docket No. 07-269 (May 19, 2009), at 2 (*NTCA Video Programming Comments*).

<sup>&</sup>lt;sup>26</sup> Rural Broadband Report at ¶ 153. Wireless backhaul facilities may not have sufficient capacity, dependability, or security for all Internet backhaul applications, however.

*Report* recommends the Commission examine "middle mile" connectivity issues in the context of open proceedings at the Commission.

NECA's Comments on the Commission's Rural Broadband Strategy noted some ILECs have formed partnerships and consortia to address the need for affordable "middle mile" transport, and in some cases these carriers have constructed their own fiber-optic transport networks to reach the Internet Backbone. Other carriers have formed partnerships with local governments and other entities to bring affordable broadband services to rural Americans. The Commission's National Broadband Plan should of course encourage such activities and partnerships, but may need to recognize in some areas construction of alternative facilities may not be feasible. In such cases, consideration of ways to extend universal service funding to support the provision or acquisition of high-capacity middle mile transport facilities may well be necessary.

The Commission's *Rural Broadband Report* correctly notes "sustained deployment of broadband services is unlikely without sufficient consumer demand for broadband services." <sup>29</sup>

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<sup>&</sup>lt;sup>27</sup> NECA *Comments*, GN Docket No. 09-29 (May 25, 2009), at 6-7. NECA also suggested the Commission recognize the value of traditional revenue pooling arrangements in facilitating rural broadband deployment and maintenance, as such arrangements provide financial stability, administrative savings and risk-sharing benefits to small rural telecom companies. Pooling also stabilizes and unifies rates, thereby avoiding end-user and wholesale rate fluctuations. *Id.* at n.10.

<sup>&</sup>lt;sup>28</sup> See e.g., "An Evaluation of Current Broadband Services To Rural Americans and The Impact of Internet Public Policy On Broadband Deployment", US Internet Industry Association (March 4, 2008), at 12 (discussing Connect Kentucky, available at <a href="http://www.usiia.org/pubs/Rural.pdf">http://www.usiia.org/pubs/Rural.pdf</a>); Development Authority of the North Country - Open Access Telecom Network (discussing network formed to connect northern New York counties, available at <a href="http://www.danc.org/oatn.html">http://www.danc.org/oatn.html</a>); "M2Z Networks Announces Wholesale Partnerships with Rural Telephone Companies" (Sept. 17, 2007) (announcing wholesale partnership between M2Z networks and group of rural telephone companies, available at <a href="http://www.m2znetworks.com/xres/uploads/documents/M2Z%20Press%20Release%209-17-07.pdf">http://www.m2znetworks.com/xres/uploads/documents/M2Z%20Press%20Release%209-17-07.pdf</a>); and "Strength in Numbers", Telephony Online (Jan. 26, 2009) (discussing Vision Net, Inc, a Montana company wholly owned by nine small telephone companies, available at <a href="http://telephonyonline.com/independent/news/small-business-bands-together-090201/index.ht">http://telephonyonline.com/independent/news/small-business-bands-together-090201/index.ht</a>

<sup>&</sup>lt;sup>29</sup> Rural Broadband Report at ¶ 105.

The *Report* also points out access to video programming "is often an important element in a customer's decision to purchase broadband service" and "could become an issue that has an impact on the potential competitiveness of the service offerings of rural broadband providers and thus on rural broadband deployment."<sup>30</sup>

NECA agrees. Indeed, availability of video programming under reasonable terms and conditions can make the difference between a viable network supporting broadband deployment and one that will fail.<sup>31</sup> Comments filed in the Commission's *Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming* identify several issues that make it difficult for rural providers to offer content to rural consumers. These include "tying" arrangements, which require small rural providers to pay for undesired programs and web content in order to have access to desired programming; "tiering" requirements; must-carry and retransmission consent rules, and practices of certain content providers' which make it difficult for rural providers to share video headend facilities.<sup>32</sup>

The *Rural Broadband Report* points out these issues are under consideration in various open proceedings. The National Broadband Strategy gives the Commission an opportunity, however, to recognize firmly the connection between access to program content and sustainability, and establish a strong presumption favoring the ability of small broadband providers to gain access to content on reasonable terms.

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 $<sup>^{30}</sup>$  *Id.* at ¶ 159.

<sup>&</sup>lt;sup>31</sup> NTCA Video Programming Comments, at 4.

<sup>&</sup>lt;sup>32</sup> See Id. at 4-5. See also, OPASTCO Reply Comments, MB Docket No. 06-189 (Dec. 29, 2006), at 8-12; OPASTCO, et al. Comments, MB Docket Nos. 07-29, 07-198 (Jan. 4, 2008), at 8-12; OPASTCO, et al. Letter from Stephen Pastorkovich, OPASTCO, to Marlene H. Dortch, FCC, MB Docket No. 07-198 (Aug. 15, 2008).

As a final step towards assuring broadband deployments are sustainable, the Commission should consider ways of transitioning existing intercarrier compensation mechanisms — developed to recover costs of providing switched local and long-distance voice services — to a broadband environment. Under existing structures, providers of traditional long distance switched and private line telecommunications services typically offer their services on an end-to-end basis to customers, obtain facilities or capacity on other carriers' networks to enable such services, and compensate originating, intermediate and terminating carriers via payment of switched and special access (wholesale) charges. For Internet traffic, local providers instead typically must pay larger carriers or ISPs so their customers can access content and services provided by others on the Internet.

The Commission should consider carefully the implications of this historic shift. On the one hand, advocates of "neutral networks" have raised strong objections to any arrangements which may be seen as providing preferential treatment to particular Internet content suppliers. <sup>33</sup> Network providers have argued forcefully, however, for the right to be able to manage network facilities and traffic in ways that provide for quality experiences for their customers while not favoring one type of content over another. <sup>34</sup> It makes no economic sense to require networks providers to build facilities capable of treating all types of Internet traffic equally when individual applications may have greater or lesser needs for transmission priorities (an e-mail message, for example, does not need the same guarantees of service quality as real-time voice or video transmissions might require).

<sup>&</sup>lt;sup>33</sup> See e.g., Google Comments, WC Docket No. 07-52 (June 15, 2007); Free Press et al. Comments (WC Docket No. 07-52 (Feb. 13, 2008).

<sup>&</sup>lt;sup>34</sup> See e.g., AT&T Comments, WC Docket No. 07-52 (Feb. 13, 2008); Comcast Comments, WC Docket No. 07-52 (Feb. 12, 2008).

Solutions to this issue are complex and will require careful study and analysis in more focused proceedings. Sole reliance on customer revenues and USF support may not be sufficient to cover the costs of deploying and maintaining broadband networks in rural, high-cost areas. Without the ability to structure wholesale service offerings in an attractive manner, rural RoR carriers may not be able to fund advanced network investment and may not even be able to maintain existing levels of broadband deployment as current revenue streams dry up.

A requirement to provide "open access" to competitive providers of applications and services thus may coincide neatly with the need to develop economically rational wholesale pricing structures. Network providers should be able to design and offer quality-of-service based wholesale offerings that support and complement the needs of providers desiring varying degrees of transmission speeds, and retail service/content providers should have the freedom to purchase such offerings at reasonable prices.

As it develops its National Broadband Plan, the Commission may wish to encourage both network and retail service/content providers to work on mutually-beneficial approaches to such wholesale service structures that do not compromise the Commission's Internet freedom principles. In any event, as the Commission seeks in this and other proceedings to preserve a free and open Internet, it should be careful to avoid imposing unreasonable restrictions that may prevent deployment of the very networks on which a free and open Internet depends.

## III. PENDING DEVELOPMENT OF ITS NATIONAL BROADBAND PLAN, THE COMMISSION MUST PROMPTLY ADDRESS KEY UNIVERSAL SERVICE AND INTERCARRIER COMPENSATION REFORM ISSUES.

The Commission is required to establish its National Broadband Plan by February 2010.<sup>35</sup> Many aspects of the Plan – such as the development of broadband inventories and "mapping" technologies – will likely take time to accomplish.<sup>36</sup> In the meantime, existing regulatory mechanisms supporting multi-use networks that provide today's broadband services in rural areas are deteriorating rapidly, as users migrate from traditional "POTS" and long-distance services to wireless and broadband applications, impairing the ability of rural carriers to upgrade their networks with broadband-capable plant. NECA member companies have already upgraded their distribution plant to the point where most loops are now capable of providing broadband services in addition to basic telephone services (*i.e.*, 92% of NECA member POTS loops are broadband-capable, but with varying speed capabilities).<sup>37</sup> Deterioration of existing cost recovery mechanisms threatens not only to impede further expansion of broadband, but may actually cause *reductions* in these existing deployment levels.<sup>38</sup>

<sup>&</sup>lt;sup>35</sup> American Recovery and Reinvestment Act of 2009, Pub. L. No. 111-5, 123 Stat. 115 (2009) (Recovery Act). The Recovery Act was signed into law on February 17, 2009.

<sup>&</sup>lt;sup>36</sup> Developing accurate and up-to-date inventories of the nation's network capabilities is a crucial element of the Commission's National Broadband Plan. NECA has previously discussed with Commission staff potential ways NECA can be of assistance in developing such inventories. *See* Letter from Colin Sandy, NECA, to Marlene H. Dortch, FCC, WC Docket No. 09-51 (Apr. 16, 2009).

<sup>&</sup>lt;sup>37</sup> Trends 2008, at 3, 7.

<sup>&</sup>lt;sup>38</sup> There is a strong link between existing access cost recovery and universal service support mechanisms, designed to make basic local exchange services affordable, and availability of broadband services in rural markets. Continued deterioration of cost recovery mechanisms, whether due "access avoidance" schemes, phantom traffic problems, artificial caps on support, or regulatory arbitrage, will inevitably have a negative impact on existing broadband services in high-cost rural areas. In contrast, adoption of policies specifically designed to encourage deployment and maintenance of last-mile broadband plant and middle-mile transmission facilities (essential to both wired and wireless rural broadband networks) will insure continued

In comments submitted in response to the Commission's *Notice of Inquiry* on universal service support for non-rural carriers, AT&T argues strongly existing universal service policies, centered on the "plain old telephone service" (POTS) model, are seriously at risk:

In today's communications marketplace, the only thing falling faster than subscribership to basic local exchange service is the volume of switched access minutes carried on the networks of incumbent local exchange carriers (ILECs) . . . Reductions in access minutes and lines, in AT&T's view, will require the Commission finally to confront the rapidly eroding implicit subsidies in the disappearing service called switched access, and to establish explicit funding mechanisms to ensure that its universal service objectives are met." <sup>39</sup>

To avoid this result, NECA recommends the Commission promptly act to resolve ongoing universal service and intercarrier compensation disputes, if only on a temporary basis, to assure a smooth transition to the new broadband regulatory paradigm. In the *Rural Broadband Report*, Acting Chairman Copps indicates his personal support for several USF reform steps that, if adopted, would help avoid potential reductions of broadband deployment levels and improve prospects for further deployment in rural areas.<sup>40</sup> These include:

- Adding broadband to the list of services supported by the universal service fund;<sup>41</sup>
- Requiring broadband providers to contribute to USF mechanisms; 42

expansion of both fixed and mobile broadband services in the rural markets served by NECA's TS pool members.

too/?scp=1&sq=will%20the%20phone%20industry%20need%20a%20bail%20out%20too&st=c se).

<sup>&</sup>lt;sup>39</sup> *Comments* of AT&T, WC Docket No. 05-337 (May 8, 2009), at 2. AT&T points to a New York Times opinion piece which notes that ILECs are losing around 10 % of their access lines each year, though the costs of maintaining their facilities are not falling nearly as quickly. *Id.* at 3, *citing* Saul Hansell, "Will the Phone Industry Need a Bailout, Too?" New York Times (May 8, 2008) (available at: <a href="http://bits.blogs.nytimes.com/2009/05/08/will-the-phone-industry-need-a-bailout-">http://bits.blogs.nytimes.com/2009/05/08/will-the-phone-industry-need-a-bailout-</a>

<sup>&</sup>lt;sup>40</sup> Rural Broadband Report at ¶ 138.

<sup>&</sup>lt;sup>41</sup> High-Cost Universal Service Support, WC Docket No. 05-337 and Federal-State Joint Board on Universal Service, CC Docket No. 96-45, Notice of Proposed Rulemaking, 23 FCC Rcd 1531 (2008).

- Elimination of the identical support rule;<sup>43</sup>
- Improving auditing and oversight of universal service funds;<sup>44</sup>
- Seeking Congressional authority to include intrastate as well as interstate revenues in the funding base. 45

NECA and other commenters in prior proceedings have also suggested the Commission avoid imposing study-area specific caps or freezes on universal service support to RoR ILECs, as such caps are fundamentally inconsistent with rate of return regulation. It should instead consider either eliminating or rebasing the existing cap on high cost universal service funding (or at minimum, revise the manner in which it is calculated).<sup>46</sup>

<sup>&</sup>lt;sup>42</sup> See Universal Service Contribution Methodology, CC Docket No. 06-122, Federal-State Joint Board on Universal Service, CC Docket No. 96-45, 1998 Biennial Regulatory Review – Streamlined Contributor Reporting Requirements Associated with Administration of Telecommunications Relay Service, North American Numbering Plan, Local Number Portability, and Universal Service Support Mechanisms, CC Docket No. 98-171, Telecommunications Services for Individuals with Hearing and Speech Disabilities, and the Americans with Disabilities Act of 1990, CC Docket No. 90-571, Administration of the North American Numbering Plan and North American Numbering Plan Cost Recovery Contribution Factor and Fund Size, CC Docket No. 92-237, Number Resource Optimization, CC Docket No. 99-200, Telephone Number Portability, CC Docket No. 95-116, Truth-in-Billing and Billing Format, CC Docket No. 98-170, IP-Enabled Services, WC Docket No. 04-36, Report and Order and Further Notice of Proposed Rulemaking, 21 FCC Rcd 7518 (2006).

<sup>&</sup>lt;sup>43</sup> See Federal-State Joint Board on Universal Service, WC Docket No. 05-337, CC Docket No. 96-45, Notice of Proposed Rulemaking, 23 FCC Rcd 1467 (2008).

<sup>&</sup>lt;sup>44</sup> See Comprehensive Review of the Universal Service Fund Management, Administration, and Oversight, WC Docket No. 05-195, Notice of Inquiry, 23 FCC Rcd 13583 (2008) (NOI).

<sup>&</sup>lt;sup>45</sup> See Federal-State Joint Board on Universal Service, CC Docket No. 96-45, Recommended Decision, 12 FCC Rcd 87 (1996), at ¶ 814-23.

<sup>&</sup>lt;sup>46</sup> NECA *Comments*, WC Docket No. 05-337 (Nov. 26, 2008), at n. 64 (suggesting to the extent an overall cap is maintained on rural high cost funding at all, it should adjusted to reflect an inflation factor rather than using the current rural growth factor approach, which has the effect of penalizing carriers when POTS lines are replaced by high-speed broadband services.. *See also*, NECA *Reply Comments*, WC Docket No. 05-337 (Dec. 22, 2008), at 19-20; NTCA *Comments*, WC Docket No. 05-337 (Nov. 26, 2009), at 29; Missouri Small Telephone Company Group *Comments*, WC Docket No. 05-337 (Nov. 26, 2008), at 3; Michigan PSC *Comments*, WC Docket No. 05-337 (Nov. 26, 2008), at 3-4; Wisconsin PSC *Comments*, WC Docket No. 05-337 (Nov. 26, 2008), at 7-8; Oklahoma CC *Comments*, WC Docket No. 05-337 (Nov. 26, 2008), at 9-10;

The Commission likewise needs to take prompt action to resolve key intercarrier compensation disputes currently threatening broadband deployment in rural areas. These steps include:

- Finding ways to unify intrastate and interstate access charges on a voluntary basis, using federal restructure mechanism funding as an incentive;
- Consider moderate increases in subscriber line charges in conjunction with a federal benchmark mechanism;
- Addressing phantom traffic and access pumping problems; and
- Resolving "access avoidance" problems by confirming interconnected VoIP services are subject to the same intercarrier compensation obligations as other voice telephony services.

Specific proposals for accomplishing these steps have been discussed exhaustively in ongoing reform proceedings. Clear, broadband-oriented policy directions established in the National Broadband Plan may help the Commission and industry stakeholders "cut through" regulatory stalemates in these proceedings and enable the industry to focus on accomplishment of the goals described above. If this were to occur, the Commission's National Broadband Plan would be well on its way to long-term success right out of the gate.

### IV. CONCLUSION

NECA recommends the Commission establish in its National Broadband Plan a clear ambitious, but attainable goal of ubiquitous nationwide access to fixed and mobile broadband services, with fiber-to-the-home (or equivalent-speed technology) as the long-term goal for fixed networks. The Commission's plan should be focused on assuring all rural consumers have

Oklahoma Rural Telephone Coalition *Comments*, WC Docket No. 05-337 (Nov. 26, 2008), at 1; Public Service Telephone, et al. *Comments*, WC Docket No. 05-337 (Nov. 26, 2008), at 13.

access to broadband services comparable to those available in urban areas, in terms of availability, speed, price and variety of content.

The plan should affirm the importance of providing Universal Service Fund support to network providers in high cost areas, without repeating prior efforts to support multiple networks in areas fundamentally uneconomic for even one carrier to serve. Instead, the Plan should promote cost-based support to only one fixed, and one mobile, broadband network in such areas, while requiring carriers receiving such support to provide open access to their broadband networks at reasonable, cost-based, wholesale prices.

To assure broadband networks remain sustainable over the long term, the Commission needs to address both "middle mile" and access-to-content issues for rural broadband providers, as these issues pose significant obstacles to economic viability of rural broadband networks. The Commission must also address ways carriers can recover a reasonable portion of the costs of providing broadband circuits to other service providers on a wholesale basis, without endangering the Commission's Internet freedom principles.

Finally, the deterioration of existing universal service and intercarrier compensation mechanisms threatens not only to impede further broadband deployments, but may actually cause reductions in existing broadband service levels. Pending implementation of the National Broadband Plan, the Commission should take prompt action to resolve ongoing universal service and intercarrier compensation reform disputes, so as to assure continued availability of existing

broadband service levels as well as improve prospects for continued expansion in the future.

Respectfully submitted,

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June 8, 2009

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#### CERTIFICATE OF SERVICE

I hereby certify that a copy of NECA's Comments was served this 8<sup>th</sup> day of June, 2009 by electronic filing and email to the persons listed below.

By: /s/ Elizabeth R. Newson Elizabeth R. Newson

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